



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/426,827	10/25/1999	KIMBERLY ANN MUDAR	D-43266-01	2390

28236 7590 08/29/2003

CRYOVAC, INC.  
SEALED AIR CORP  
P.O. BOX 464  
DUNCAN, SC 29334

23  
EXAMINER

HON, SOW FUN

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/426,827

Applicant(s)

MUDAR ET AL.

Examiner

Sow-Fun Hon

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8, 10-24, 26 is/are rejected.
- 7) ☒ Claim(s) 9 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 22.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/02/03 has been entered.

### ***Rejections Withdrawn***

2. The 35 U.S.C. 112, 2<sup>nd</sup> paragraph and 35 U.S.C. 103(a) rejections of claims 1, 3-25 have been withdrawn due to Applicant's clarification in Paper # 21 (filed 06/02/03).

### ***New Rejections***

#### ***Claim Rejections - 35 USC § 103***

3. Claims 1, 3-8, 11-17, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson et al. ('806) in view of Walton et al. (US 5,562,958).

Ferguson et al. ('856) has packaging films made into bags which are heat shrinkable and have improved shrink, tear, barrier and puncture resistance properties ('856, column 1, lines 1-15). The multilayer barrier film comprises a layer comprising a blend of heterogeneous ethylene/alpha-olefin copolymer having a density of less than 0.915 g/cm<sup>3</sup> and a composition distribution breadth index less than 55 percent (VLDPE as defined by the specification, abstract) and ethylene/alpha-olefin copolymer having a density of greater than 0.915 g/cm<sup>3</sup> (LLDPE as

Art Unit: 1772

defined by the specification, abstract)(a blend of linear low density polyethylene and a very low density polyethylene), a gas barrier layer (inner O<sub>2</sub> barrier layer), and an inside-sealant layer. An inner layer comprises ethylene/unsaturated ester copolymer (EVA) ('856, column 5, lines 25-30, column 9, lines 1-70 and column 10, lines 1-20).

Although Ferguson et al. fails to teach the amounts of VLDPE and LLDPE relative to each other in the blend, since Ferguson et al. emphasizes VLDPE in the examples (column 8, lines 1-70) and teaches the unexpected results of VLDPE in terms of puncture resistance, oxygen barrier and heat-shrink properties (column 8, lines 1-70), it is the examiner's position that by these teachings, Ferguson et al. infers that VLDPE is present in a dominant amount so that LLDPE is present in a minor amount in the blend. In the absence of a showing of unexpected results, it is the examiner's position that the claimed amounts of dominant VLDPE and minor LLDPE relative to each other in the blend is a result of routine experimentation.

Furthermore, since Ferguson et al. teaches that the VLDPE gives unexpected results in terms of puncture resistance, oxygen barrier and heat shrink properties, it is the examiner's position that it is within the scope of routine experimentation to use a single layer-film of the VLDPE/LLDPE blend for disposable heat shrinkable, puncture-resistant food-packaging in order to reduce production costs.

Ferguson et al. teaches ball burst impact strengths of 13 to 28 cm.kg (1.3 to 2.8 Joules) which is directly related to the puncture resistance highly desirable for the packaging of articles which contain bones. Since the longitudinal and transverse free shrink properties of the biaxially oriented film is at least 240 % at 190 °F (column 8, lines 10-50), it is the examiner's position that the film has a total free shrink of at least 35 % at 185 °F.

Art Unit: 1772

Walton et al. teaches a biaxially-oriented heat-shrinkable film for packaging poultry or meat ('958, abstract). Walton et al. further teaches that in order to avoid puncturing by sharp exposed bones, it is well known in the art to provide an extra layer of film at critical points of the bag in a patch-like fashion ('958, column 3, lines 5-10).

Both Walton et al. and Ferguson et al. are directed to biaxially-oriented heat-shrinkable puncture-resistant film for packaging food with bones, and are thus analogous art.

Since it is well known in the art to use patches on bags for use with meat cuts to prevent rupturing as taught by Walton et al., it would have been obvious to one of ordinary skill in the art to have provided additional material, or a patch, to the bag of Ferguson et al. ('856), to give additional reinforcement. Furthermore, it would have been obvious to one having ordinary skill in the art to have used the bag material taught by Ferguson et al. ('856) for making the patch. Using the identical material would have provided the same shrinkage properties of the bag as well as providing a thickened film in the critical areas where sharp bones are likely to puncture the bag.

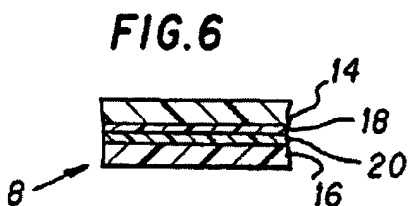
4. Claims 10, 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson et al. ('856) in view of Walton et al. as applied to claims 1, 3-8, 11, 13-17, 26 above, and further in view of Ferguson et al. ('403).

Ferguson et al. ('856) teaches a heat shrinkable bag comprising a layer comprising a blend of heterogeneous ethylene/alpha-olefin copolymer having a density of less than 0.915 g/cm<sup>3</sup> and a composition distribution breadth index less than 55 percent (VLDPE as defined by the specification, abstract) and ethylene/alpha-olefin copolymer having a density of greater than 0.915 g/cm<sup>3</sup>. Ferguson et al. ('856), however, fails to teach the symmetrical embodiment

Art Unit: 1772

wherein the inner layer of EVA adheres to itself and has a vinyl acetate content of from 3 to 50 weight percent, thus forming two outer layers of the blend of VLDPE/LLDPE.

Ferguson et al. ('403) teaches a biaxially heat shrinkable bag, and a biaxially heat shrinkable patch which shrinks with the bag, and which is made from a multilayer film which comprises a layer of ethylene vinyl acetate copolymer (EVA) ('403, abstract). Below is a symmetrical embodiment of the patch which is made by a well-known procedure of making a vacuum bag by collapsing the bubble and flattening the tube wherein the inner EVA surface adheres to itself (column 4, lines 10-70):



The inner layers 18 and 20 comprise EVA having 28 % vinyl acetate ('403, column 3, lines 10-25), which is in the range for the EVA to self-adhere (column 4, lines 65-70 and column 5, lines 1-5). Layers 14 and 16 are also taught to comprise 1.7 % pigment ('403, column 3, lines 45-50). The patch is adhered with an adhesive to the bag ('403, column 5, lines 1-10). Ferguson et al. ('403) is directed to the elimination of puncturing by sharp bones (column 1, lines 10-55).

Since Ferguson et al. ('403) and Ferguson et al. ('856) are directed to biaxially-oriented puncture-resistant bags for packaging food with bones, they are analogous art. Thus it would have been obvious to one of ordinary skill in the art to have used the well-known technique of vacuum bag manufacturing as taught by Ferguson et al. ('403) to form a patch out of the bag film

Art Unit: 1772

of Ferguson et al. ('856) in order to obtain a bag with a patch having the desired symmetry of layers.

***Allowable Subject Matter***

5. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art ('856) fails to teach the inclusion of homogenous ethylene/alpha-olefin copolymer in the amount of from about 1 to about 20 percent based on the blend weight, in addition to the VLDPE and LLDPE.

6. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art ('856) fails to teach an intermediate layer as well as the two outer layers all containing the blend of VLDPE and LLDPE, even in combination with the secondary supporting reference ('403).

***Response to Arguments***

7. Applicant's arguments with respect to the prior art rejections have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

Art Unit: 1772

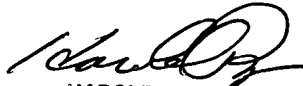
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

SH

Sow-Fun Hon

08/08/03

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

8/11/03